REMARKS

In the Advisory Action mailed on November 29, 2005, the Examiner maintained the rejection of claims 10-15 and 17-37 as presented in the Final Office Action mailed on September 2, 2005. In lieu of filing a Notice of Appeal, Applicant is filing a Request for Continued Examination (RCE) pursuant to 37 C.F.R. § 1.114, along with this Preliminary Amendment. By this paper, claims 1, 17, 18, 24, 30, and 34 have been amended to more clearly set forth the recited subject matter, and claims 19, 31, 36, and 37 have been canceled. No new matter has been added. Applicant respectfully requests reconsideration of the application in view of the remarks set forth below. Applicant believes that all pending claims are in condition for allowance.

Rejections Under 35 U.S.C. § 102

In the Final Office Action, the Examiner rejected claims 10-15 and 34-35 under 35 U.S.C. § 102(e) as being anticipated by Nevis et al. (U.S. Patent No. 6,581,159, hereafter referred to as "the Nevis reference"); and claims 17-23 under 35 U.S.C. § 102(e) as being anticipated by Spiegel et al. (U.S. Patent No. 6,711,675, hereafter referred to as "the Spiegel reference"). As set forth in detail below, Applicant respectfully traverses the rejection of claims 10-15, 17-23 and 34-35.

Legal Precedent

Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under Section 102, every element of the

claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831,

15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under Section 102, a

single reference must teach each and every element or step of the rejected claim. *Atlas*

Powder v. E.I. du Pont, 750 F.2d 1569 (Fed. Cir. 1984). Thus, if the claims contain even one

recitation not found in the cited reference, the reference does not anticipate the claimed

subject matter.

The Nevis Reference

The Examiner rejected claims 10-15 and 34-35 as being anticipated by the Nevis

reference. As discussed in detail below, Applicant respectfully traverses the rejection.

Claims 10-15

In rejecting independent claim 10, the Examiner stated, *inter alia*,

> Nevis teaches ... a security device ... the security device being a switch (Nevis, column 5 lines 15-30, installs if hash values are correct, the act of installing occurs in response to a stimulus in the form of a correct hash comparison).

Office Action, pages 6-7.

Applicant continues to disagree with the Examiner's rejection for the reasons set forth

in the previous response. Nevertheless, in order to expedite allowance of the claims and to

highlight additional differences between the claimed invention and what is disclosed in the

Nevis reference, independent claim 10 has been amended. As amended, claim 10 recites,

inter alia, "A computer system comprising ... an appliance server...being adapted to

determine if a program is operable." (Emphasis added).

In sharp contrast, the Nevis reference discloses computing hash values and comparing the computed hash values with saved values. *See* Nevis, col. 5, ll. 10-30. If the comparison shows the hash values are equal, it simply means that the module provided has been proven to be the same as that which existed at the time the firmware was created. *See id.* at col. 5, ll. 19-22. No determination is made as to the operability of the program. Thus, the Nevis reference does not disclose "an appliance server ... being adapted to determine if a program is operable" as recited in claim 10. As such, Applicant respectfully submits that the subject matter of claim 10 is patentable over the teachings of the Nevis reference. Accordingly, Applicant respectfully requests withdrawal of the Examiner's rejection of independent claim 10, as well as all claims dependent thereon.

Claims 34-35

In rejecting independent claim 34, the Examiner stated:

> Nevis teaches all that is described above and further teaches the loading of the program over a network connection (Nevis, col. 3, lines 51-58, Internet), and if the network connection fails, re-establishing the network connection and once the network connection is re-established, continuing to load the program into the memory over the re-established network connection (Nevis, column 3 lines 51-58, Internet).

Office Action, pages 7-8. Applicant disagrees and respectfully traverses the rejection.

Again, Applicant continues to disagree with the Examiner's rejection for the reasons set forth in the previous response. Nevertheless, in an effort to expedite allowance of the claims, independent claim 34 has been amended to include language that further highlights additional differences from the Spiegel reference. Specifically, independent claim 34 now recites, *inter alia*, "a method of operating a computer system, the method comprising the acts of: loading a program into a memory over a network connection, wherein the act of

loading comprises the act of authenticating a user directing the loading of the program; if the network connection fails, *re-establishing the network connection*; and once the network connection is re-established, *re-authenticating the user, and continuing to load the program* into the memory over the re-established network connection *until the program has been successfully loaded.*" (Emphasis added).

In sharp contrast, there is no description in the Nevis reference as to what occurs if the connection is lost after beginning to load the program. If the network connection is lost while downloading firmware, there is a potential security risk. *See* published application, paragraph [0025]. Typically, the program that was being loaded is inoperable because it is incomplete, and the previous program is inoperable because it has been partially written over. The Nevis reference discloses nothing as to how to cope with such an occurrence. As such, the Nevis reference does not disclose "re-establishing the network connection…re-authenticating the user, and continuing to load the program … until the program has been successfully loaded" as recited in claim 34. As such, the Nevis reference fails to disclose all the recitations of independent claim 34.

In view of the remarks set forth above, Applicant respectfully submits that the subject matter of claim 34, and thus the subject matter of dependent claim 35, is not disclosed by the Nevis reference. Accordingly, Applicant respectfully requests withdrawal of the Examiner's rejection of claims 34 and 35.

The Spiegel reference

The Examiner rejected claims 17-23 as being anticipated by the Spiegel reference. As discussed in detail below, Applicant respectfully traverses the rejection.

Claims 17-23

In rejecting independent claim 17, the Examiner stated: "Spiegel teaches verifying a program of an appliance server (Spiegel, col. 4, lines 38-39) and if not verified, signaling a host computer to load a replacement program into the appliance server (Spiegel, col. 4, lines 40-43)." Applicant disagrees with the Examiner's assessment of the Spiegel reference and respectfully traverses the rejection.

In order to expedite allowance of the claims, independent claim 17 has been amended to recite a method of operating a computer system comprising the acts of: "verifying a program of an appliance server, wherein the act of verifying comprises the acts of *authenticating the program and determining whether the program is operable*; and if not verified, signaling *a host computer* to *load* a replacement program into the appliance server." (Emphasis added).

As explained in the previously filed Response to Final Office Action on page 11, lines 10-23, the Spiegel reference does not disclose a "host computer" for performing any function, much less a host computer that may be signaled to load a replacement program into an appliance server. Indeed, the section of the Spiegel reference relied upon by the Examiner merely states that if validation fails, a backup BIOS startup block located in the "reclaim block" may be verified. *See* Spiegel, col. 4, lines 40-43. There is no indication that the

reclaim block is a host computer. In fact, the Spiegel reference describes that the reclaim block is also referred to as an "update recovery block" and it appears to be merely another block of code partitioned in the firmware hub. *See id.* at FIG. 2; col. 3, ll., 18 to col. 4, ll. 29. As such, and additionally, the Spiegel reference fails to disclose the *loading* of a replacement program from a *host* computer. Specifically, the replacement program is a copy of the original and is already in memory and the system in Spiegel simply "jumps to it." *See id.* at col. 4, ll. 40-43. As such, the Spiegel reference simply does not teach that a *host computer* may be signaled to *load* a replacement program as set forth in independent claim 17.

Additionally, the Spiegel reference does not disclose authenticating a program and determining whether the program is operable as set forth in claim 17. Specifically, Spiegel only discloses verification through checksum or similar process. *See* Spiegel, col. 4, ll. 12-16. However, it is well known that a checksum does not provide authentication or a determination of operability. Therefore, there is no verifying of a program comprising the acts of "authenticating the program and determining whether the program is operable" as set forth in claim 17.

In view of the remarks set forth above, Applicant respectfully submits that the subject matter of independent claim 17, and thus the subject matter of dependent claims 18, 20-23, is not disclosed by the Spiegel reference. Accordingly, Applicant respectfully requests withdrawal of the Examiner's rejection of claims 17-23.

Rejections Under 35 U.S.C. § 103

In the Final Official Action, the Examiner rejected claims 24-31 under 35 U.S.C.

§103(a) as being unpatentable over the Nevis reference in view of the Spiegel reference; and

claims 36-37 under 35 U.S.C. §103(a) as being unpatentable over the Nevis reference in view

of Holtey (U.S. Patent No. 5,491,827, hereafter referred to as "the Holtey reference"). The

Applicant respectfully traverse these rejections.

Legal Precedent

The burden of establishing a *prima facie* case of obviousness falls on the Examiner.

Ex parte Wolters and Kuypers, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). To establish *prima*

facie obviousness of a claimed invention, *all* the claim limitations must be taught or

suggested by the prior art. *In re Royka,* 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974)

(emphasis added). "All words in a claim must be considered in judging the patentability of

that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496

(C.C.P.A. 1970). Additionally, to establish a *prima facie* case, the Examiner must not only

show that the combination includes *all* of the claimed elements, but also a convincing line of

reason as to why one of ordinary skill in the art would have found the claimed invention to

have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q.

972 (B.P.A.I. 1985).

Claims 24-31

In rejecting independent claim 24, the Examiner stated:

Nevis teaches everything described above, but fails to teach the
reloading of the first program from the execution memory into the storage
memory if the second program is not verified. Spiegel teaches the reloading of

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the first program from the execution memory into the storage memory if the second program is not verified (Spiegel, col. 4, lines 40-43, backup bios startup block). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Spiegel's method of responding to failed authentication with Spiegel's method of updating a BIOS because it offers the advantage of allowing reprogramming if tampering is detected (Spiegel, col. 1, lines 34-55).

Office Action, Page 9. Applicant disagrees with the Examiner's assessment and respectfully

traverses the rejection.

In order to speed the claims toward allowance and to highlight differences from the

cited art, independent claim 24 has been amended. As amended, independent claim 24

recites, *inter alia*, "A method of operating a computer system, the method comprising the acts

of...having a copy of the first program stored in a storage memory...loading the second

program into the storage memory...*authenticating the second program and determining*

whether the second program is operable; and if not verified, *reloading* the first program from

the *execution memory* into the storage memory." (Emphasis added).

The Examiner admits, and the Applicant agrees, that the Nevis reference fails to teach

reloading the first program from the execution memory into the storage memory if the second

program is not verified. The Spiegel reference fails to cure the deficiencies of the Nevis

reference in this respect. The Spiegel reference discloses saving a backup copy of a BIOS

program into the firmware hub prior to replacement of the BIOS program. *See* Spiegel, FIG.

2; col. 3, ll. 18 to col. 4, ll. 25. Essentially there are two copies of the firmware initially saved

and, if the first program fails, the Spiegel reference discloses a "jump" to the backup copy.

See Spiegel, col. 4 ll. 40-43. Thus the Spiegel reference does not disclose "*reloading* the first

program from the *execution memory*" as recited in claim 24. As such, the Spiegel reference fails to cure the deficiencies of Nevis.

Additionally, neither the Nevis reference nor the Spiegel reference disclose authenticating *and* verifying the operability of the program. As such, the Nevis reference, alone or in combination with the Spiegel reference, fails to disclose all of the elements set forth in independent claim 24.

In view of the remarks set forth above, Applicant respectfully submits that the subject matter of independent claim 24, and thus the subject matter of dependent claims 25-30, patentably distinguishes over the teachings of the Nevis and Spiegel references. Accordingly, Applicant respectfully requests withdrawal of the Examiner's rejection of claims 24-31.

Claim 36 and 37

Claims 36 and 37 have been canceled and therefore the Applicant asserts that the rejection of these claims is moot.

Conclusion

In view of the remarks and amendments set forth above, Applicant respectfully requests allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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